

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 December 2003 (11.12.2003)

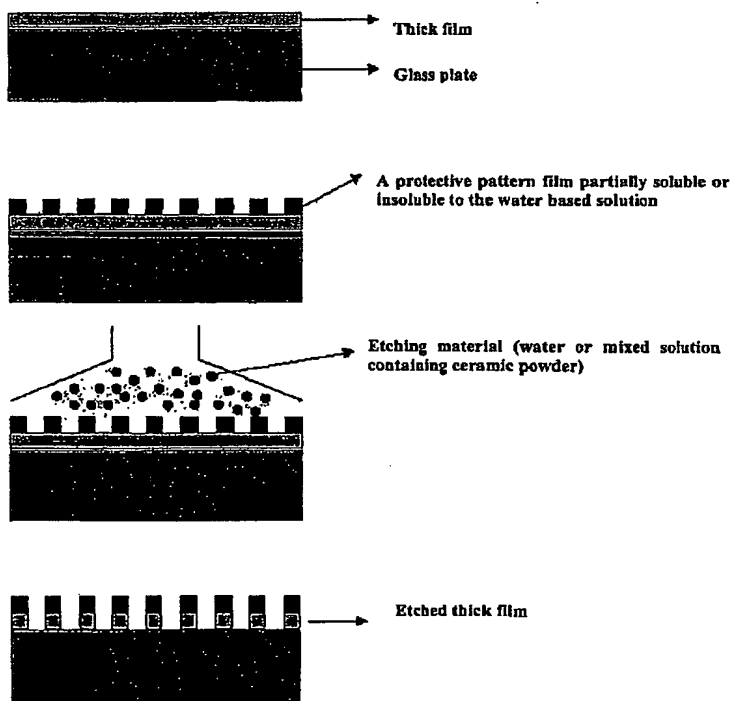
PCT

(10) International Publication Number
WO 03/102997 A1

- (51) International Patent Classification⁷: H01J 17/49
(21) International Application Number: PCT/KR02/00612
(22) International Filing Date: 8 April 2002 (08.04.2002)
(25) Filing Language: Korean
(26) Publication Language: English
(30) Priority Data: 2002/18720 4 April 2002 (04.04.2002) KR
(71) Applicant (for all designated States except US): AMMTRON CO., LTD [KR/KR]; 5F., Jeonjahyeop-dong Bldg., 371-51, Gasan-dong, Geumcheon-gu, Seoul 153-803 (KR).
(72) Inventor: KIM, Yong Seog [KR/KR]; 1429-601, Mok-DongSinsigaji Apt., Sinjeong-Dong, Yangcheon-Gu, Seoul 158-070 (KR).
(72) Inventors; and
(75) Inventors/Applicants (for US only): HWANG, Jia Ha [KR/KR]; 106-1403, 30, Sinjeong-Dong, Mapo-Gu, Seoul 121-140 (KR). KIM, Yong Ho [KR/KR]; 178-58, Jeongneung1-Dong, Seongbuk-Gu, Seoul 136-840 (KR).
(74) Agent: SOHN, Chang Kyu; 4F., Halla Bldg., 641-17 Yoksam-dong, Kangnam-gu, Seoul 135-080 (KR).
(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: METHOD OF MANUFACTURING BARRIER RIBS FOR PDP BY ETCHING OF THICK FILM USING WATER-BASED SOLUTION AND COMPOSITIONS THEREFOR



(57) Abstract: Disclosed is a method of manufacturing barrier ribs for a Plasma Display Panel (PDP), which includes the steps of forming a thick film (or, "green tape") for barrier ribs on a glass or metal substrate by using composition for forming the barrier ribs, which contains water soluble components and solvent soluble components together as a binder; forming a protective pattern film partially soluble or insoluble to the water based solution on the thick film; etching the thick film into a barrier rib shape by using solution or mixed solution containing ceramic powder as an etching accelerator; and sintering the etched thick film. This method causes rare environmental pollution, enables to make barrier ribs having fine and complex shapes and reduces material costs required for the barrier rib. Thus, the method may improve quality of PDP and reduce manufacture costs of the rear plate.

WO 03/102997 A1

BEST AVAILABLE COPY